K.M. Govt. College Narwana (Jind)

Week Wise Lesson Plan 2025-26(Odd Semester)

Computer Science (Offline mode)(NEP-2020)

Name: Dr. Poonam Sidhu

Subject: Animation (BCA 5th Sem) Code- B23-VOC-101

	August
Week 1	Animation: origin and growth, Basic principle of animation,
Week 2	Animation: meaning definition & types.
Week 3	Main elements of animation, Role of Computers in animation,
Week 4	Computer language for Animation.
	<u>September</u>
Week 5	Flash Editor, Panels, Timeline, Tools,
Week 6	Saving and Uploading Files, More tools,
Week 7	Utilities, Grouping,
Week 8	Arranging Graphic Symbols,
Week 9	Alignment, Libraries, Layers.
	<u>October</u>
Week 10	Keyframes, Frame by Frame Animation, Onion Skins,
Week 11	Frame rate, Motion Tweening, Stop Action, Rotate & Spin,
Week 12	Assignment, Info Panel, Movie Explorer, Shape Tweening, Button Symbols,
Week 13	Deepawali Vacations
Week 14	Mid Terms Exam
	<u>November</u>
Week 15	Action Script, Adding Sound to Button, Publishing and Exporting, Making Compositions,
Week 16	Class Test, Masking and Transparency, Animation Layers.
Week 17	Video & Audio Effects, Managing Layers, Rendering and getting output. Object
Week 18	Character Animation in 2D: Extreme Poses and Personality Walks, Bouncing Ball Animation Theory,
	Walk Cycle Study.
	December
Week 19	Winter vacations ,Exam

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Week Wise Lesson Plan 2025-26(Odd Semester)

Computer Science (Offline mode)(NEP-2020)

Dr. Poonam Sidhu

Sub:Dis. Strut.in comp (Bca1stSem)(Minor)

Code-BCA23-M101

	<u>August</u>
Week 1	An introduction to matrices and their types, Operations on matrices,
Week 2	Symmetric and skew-symmetric matrices, Minors, Co-factorsr.
Week 3	Determinant of a square matrix, Adjoint and inverse of a square matrix,
Week 4	Solutions of a system of linear equations up to order 3. Introduction to counting: Basic counting techniques – inclusion and exclusion,
	pigeon-hole principle,
	September
Week 5	Permutation, combination, summations. Introduction to recurrence relation and generating function.
Week 6	Introduction to recurrence relation and generating function.
Week 7	Class Test
Week 8	Introduction to Probability, Random Experiment, Random Variable, Random Example,
Week 9	Expected Value, Independent Variables, Dependent Variable,
	<u>October</u>
Week 10	Bayes Theorem, Mutually Exclusive events, Complementary Events,
Week 11	Geometrical Probability, Probability with or without replacement.
	Probability Distribution: Binomial Distribution,
Week 12	Class Test and Assignment
Week 13	Deepawali holidays,
Week 14	Mid Term Exam, Poisson's Distribution, Geometric Distribution
	November
Week 15	Introduction to Statistics: Central Tendency, Mean, Mode,
Week 16	Median, Dispersion

Week 17	Data Types and Data presentation: Data types: Attributes, Variable,
	Discrete and Continuous variable, Univariate and Bivariate distribution,
Week 18	Types of Characteristics, Different types of Scales: normal, ordinal, interval, and ratio.
	Data presentation: Frequency distribution, Histogram, Ogive curves.
	<u>December</u>
Week 19	Winter vocations ,Exam

K. M. Govt. College Narwana (Jind)

Week Wise Lesson Plan 2025-26(Odd Semester)

Computer Science (Offline mode) NEP-2020

Dr. Poonam Sidhu

Sub:L.O.C (Bca1stSem)(Major) Code-BCA23-CC103

	August
Week 1	Number Systems: Binary, Octal, Hexadecimal etc. Conversions from one number
	system to another, BCD Number
Week 2	System. BCD Codes: Natural Binary Code, Weighted Code, Self-Complimenting
	Code, Cyclic Code.
Week 3	Error Detecting and Correcting Codes. Character representations: ASCII, EBCDIC and Unicode.
Week 4	Error Detecting and Correcting Codes. Character representations: ASCII,
	EBCDIC and Unicode.
	<u>September</u>
Week 5	Binary Arithmetic: Binary Addition, Binary Subtraction, Binary Multiplication,
	Binary Division using 1's and 2's Compliment representations, Addition and
	subtraction with BCD representations.
Week 6	Boolean Algebra: Boolean Algebra Postulates, basic Boolean Theorems, Boolean
	Expressions, Boolean Functions, Truth Tables, Canonical Representation of
	Boolean Expressions: SOP and POS,
Week 7	Simplification of Boolean Expressions using Boolean Postulates & Theorems,
	Kaurnaugh-Maps (upto four variables), Handling Don't Care conditions.Class
	Test
Week 8	Logic Gates: Basic Logic Gates – AND, OR, NOT, Universal Gates – NAND,
	NOR, Other Gates – XOR, XNOR etc. Their symbols, truth tables and Boolean
	expressions.
Week 9	Combinational Circuits: Design Procedures, Half Adder, Full Adder, Half
	Subtractor, Full Subtracor,
	October
Week 10	Multiplexers, Demultiplexers, Decoder, Encoder, Comparators, Code Converters
Week 11	Sequential Circuits: Basic Flip- Flops and their working. Synchronous and
	Asynchronous Flip –Flops,
Week 12	Triggering of Flip-Flops, Clocked RS, Assignment
Week 13	Deepawali Vacation

Week1 4	D Type, JK, T type and Master-Slave Flip-Flops.
	November
Week 15	State Table, State Diagram and State Equations.
Week1 6	Flip-flops characteristics & Excitation Tables. Class Test
Week 17	. Sequential Circuits: Designing registers –Serial-In Serial-Out (SISO), Serial-In
	Parallel-Out (SIPO), Parallel-In Serial-Out (PISO)
Week 18	Parallel-In Parallel-Out (PIPO) and shift registers
	<u>December</u>
Week 19	Winter Vacation

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Week Wise Lesson Plan 2025-26(Odd Semester)

Computer Science (Offline mode) NEP-2020

Dr. Poonam Sidhu

Sub: L.O.C (Bsc1stSem)(Physical Science) code-B23-CC-C1

	Angust
	August
Week 1	Number Systems: Binary, Octal, Hexadecimal etc.
	Conversions from one number system to another,
	BCD Number
Week 2	System. BCD Codes: Natural Binary Code, Weighted
	Code, Self-Complimenting Code, Cyclic Code.
Week 3	Error Detecting and Correcting Codes. Character
	representations: ASCII, EBCDIC and Unicode.
Week 4	Error Detecting and Correcting Codes. Character
	representations: ASCII, EBCDIC and Unicode.
	September
Week 5	Binary Arithmetic: Binary Addition, Binary
	Subtraction, Binary Multiplication, Binary Division
	using 1's and 2's Compliment representations,
	Addition and subtraction with BCD representations.
Week 6	Boolean Algebra: Boolean Algebra Postulates, basic
	Boolean Theorems, Boolean Expressions, Boolean
	Functions, Truth Tables, Canonical Representation of
	Boolean Expressions: SOP and POS,
Week 7	Simplification of Boolean Expressions using Boolean
	Postulates & Theorems, Kaurnaugh-Maps (upto four

	variables), Handling Don't Care conditions.Class Test	
Week 8	Logic Gates: Basic Logic Gates – AND, OR, NOT,	
	Universal Gates – NAND, NOR, Other Gates – XOR,	
	XNOR etc. Their symbols, truth tables and Boolean	
	expressions.	
Week 9	Combinational Circuits: Design Procedures, Half	
	Adder, Full Adder, Half Subtractor, Full Subtracor,	
	<u>October</u>	
Week	Multiplexers, Demultiplexers, Decoder, Encoder,	
10	Comparators, Code Converters	
Week	Sequential Circuits: Basic Flip- Flops and their	
11	working. Synchronous and Asynchronous Flip –Flops,	
Week	Triggering of Flip-Flops, Clocked RS, Assignment	
12		
Week	Deepawali Vacation	
13		
Week1	D Type, JK, T type and Master-Slave Flip-Flops.	
4		
	November	
Week	State Table, State Diagram and State Equations.	
15		
Week1	Flip-flops characteristics & Excitation Tables. Class	
6	Test	
Week	. Sequential Circuits: Designing registers –Serial-In	
17	Serial-Out (SISO), Serial-In Parallel-Out (SIPO),	
	Parallel-In Serial-Out (PISO)	
Week	Parallel-In Parallel-Out (PIPO) and shift registers	
18		
	<u>December</u>	
Week	Winter Vacation	